**Assignment:**

Group of 4 people

At least 2 experiments with your chosen technology. (can be in a game context, but not have to be). It is allowed to switch to another technology half way through the course to do the second experiment.

Document your findings in an open source platform (preferably github)

Clearly state your roles/tasks (not one is doing all the work)

**Challenges**

* UI in VR
* Interaction
* Movement
* Multiplayer
* Feedback
* Story driven
* You can use your own idea

**Grading Criteria**

1 (TECH) Quality Experiments/Prototypes:

* Quality/complexity of experiments/prototypes and execution of design

2 (TECH/ONTW/ORGA/PROF)

* Quality of report
* At least reachable on open source platform (Git, Instructables)
* Clear explanation of decision taking with regard to concept and technical choices
* Use of visual elements (pictures/slides/prototype)
* Clear explanation of each student’s role/responsibilities

**Concept Ideas**

***Tobii:***

* Go into caves and your eyes are shining the light
* Go into caves and don’t look at the TNT
* Choose with path you go to.
* Penguin with an iceberg. Keep it steady with your eyes.
* Painting with your eyes.
* Playing piano with your eyes.
* Vehicle control ? -> (Plane, car)
* Spot the predator; You are a prey and a predator moves towards you, but hides and reacts to eye contact/where the player is looking. (predator = animal, ghost, monster, other)

***Other:***

* Kinect: experiment to test if we can make a 3d model of 'player' and make it hold weapons/objects If 'player' is in correct position.
* HOLOLENS: your own interior design program.
* AR: scan a product(food/drinks) to check how many calories it contains
* Leap motion: hands dance, make a dancing game for your hands
* Leap motion: claying with your hands

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**Division of tasks**

Sergi - coding

Daan - coding

Daniëlle - art (level design, interface design)

Max – design (level design, concept document)

Masa – art (interface design)

Concept draw game:

In this 2D game the goal is to get the ball to the other side of the screen. Before the ball goes rolling, the player can draw obstacles with his eyes which will determine which way the ball will roll. At some spots there are collectables which gives the player extra points. The more collectables the player gets, the more points he'll score. Also, the less obstacles the player draws, the more points he'll get. The player only draws lines or other shapes with his eyes while pressing the mouse button.

We chose this concept for several reasons. We were trying to find something that wasn't done already with the eyetrack. First, we were thinking of making a game where you balance a ship or something with your eyes. We also thought of making a drawing program like Paint. We couldn't find anything like this that was already made with Eyetrack so we really wanted to experiment with the idea that you could draw with your eyes and doing something more than using the eyetrack as targeting. Still we weren't fully content with the concept. We have two artists on the team so we wanted to make something a bit more interesting for them as well. Finally, thought of combining the idea of drawing and a game! The whole team was enthusiastic about this idea and we went right on to it!

For the coding part we have to experiment how difficult it will be to code this.

First Daan will make the code in the way that we could even test it and experiment without the Tobii eyeX by using the mouse position.

While Daan was experimenting with the coding of the Tobii, Danielle and Max Mijs were making some level design sketches and Masa some interface designs. Sergi was already focusing on using the kinect as well for the experiments, this failed. Eventually, he went experimenting with the Hololens.

We had a playtest to see if our game worked with the Tobbi. We tested it with several people. Despite some small technical issues the feedback was positive. We noticed that for a lot of people it was the first time that they were in contact with the Tobbi eyetrack, so it took some time to get used to it. That is also why our game is a bit difficult at first. Most people took about 8 to 9 lines to complete the level, while our goal was set to 3 lines. Fortunately, most people still eventually complete the level so our concept worked.

We also thought about how we could expand this concept so it would be a game with a lot of variation and different levels of difficulties. We thought about adding particles around your eye's focus point so it would be more difficult to draw a line. We also thought about things you may not look at to make it even more difficult.

For the next experiment we will try to choose a different technology.

Meeting monday 18 september:

* Playtest(and document) the draw game

28 september:

Presentation.